

Applicant : S.V. Sreenivasan et al.
Serial No. : 10/788,700
Filed : February 27, 2004
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Attorney's Docket No.: 21554-070001 / P107-49-03

Amendments to the Drawings:

Please replace the Figures as filed with the following replacement sheets attached.

REMARKS

Claims 1-20 are pending in the application.

Claims 1-20 stand rejected.

Claims 1, 9, and 16 are amended herein.

Claims 21-23 are cancelled herein without prejudice.

No new matter has been added to the Application.

I. Drawings

Examiner's comment is gratefully acknowledged. Figures 1-5 are hereby resubmitted with a Prior Art legend. Formal drawings are also hereby provided to replace those that were originally filed with the application.

II. Rejections Under 35 U.S.C. § 102

Claims 1, 3, 5, 8-10, 13, 15-16 and 19 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Colburn* (Doctor of Philosophy dissertation, University of Texas at Austin, 2001). Applicants respectfully traverse this rejection.

Claims 1, 9, and 16 are amended herein to include the features of Claims 21, 22, and 23, respectively. Examiner admits: "Colburn appears to be silent to the step that the substrate is populated by a plurality of physically separated imprinted layers corresponding to the plurality of flowable regions...." Final Office Action, at 5. This rejection is now moot. Applicants respectfully request removal of the 35 U.S.C. § 102(b) rejection of Claims 1, 9, and 16 and Claims 3, 5, 8, 10, 13, 15, and 19 dependent therefrom.

III. Rejections Under 35 U.S.C. § 103(a) Over *Colburn*

Claims 2, 4, 6-7, 11-12, 14, 17-18 and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Colburn*. Applicants respectfully traverse this rejection.

Claims 2, 4, 6-7, 11-12, 14, 17-18 and 20 depend from allowable claims and therefore are allowable over *Colburn*.

Applicants respectfully request removal of the 35 U.S.C. § 103(a) rejection of Claims 2, 4, 6-7, 11-12, 14, 17-18 and 20 over *Colburn*.

IV. Rejections Under 35 U.S.C. § 103(a) Over *Colburn* in View of *Everhart*

Claims 21-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Colburn* in view of U.S. Patent No. 6,048,623 to Everhart *et al.* ("*Everhart*"). This rejection is now moot. However, features of Claims 21-23 are incorporated herein into Claims 1, 9, and 16, respectively.

Examiner states: "Everhart teaches a process wherein subsequent to a solidifying step, the substrate is populated by a plurality of physically separated imprinted layers corresponding to the plurality of stamped, flowable regions." Final Office Action, at 5.

If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221, U.S.P.Q. 1125 (Fed. Cir. 1984).

Colburn describes depositing an etch barrier on a template or between the template and the substrate. The template is brought into contact with the substrate, and the etch barrier is crosslinked. The template is then separated from the substrate. *Colburn*, at 21-22. Thus, the etch barrier is solidified on the substrate while the template is in contact with the substrate. In contrast, *Everhart* describes inking an elastomeric stamp and allowing the stamp to dry. The stamp is then applied to a gold surface to achieve contact between the stamp and the surface. The stamp is then peeled from the surface. *Everhart*, col. 4, ll. 25-37. Thus, solidification in *Everhart* occurs while the ink is on the stamp (or template), and not in contact with the surface. Combining *Everhart* with *Colburn* would change the principle of operation of *Colburn*, and render *Colburn* unsatisfactory for its intended purpose.

Furthermore, in Claims 1, 9, and 16, "wherein subsequent to the solidifying step" refers to solidifying a plurality of flowable regions that were formed on a substrate. Since *Everhart*

describes solidifying the ink on the stamp (template), the combination of the cited art does not teach or suggest solidifying a plurality of flowable regions that were formed on a substrate, wherein subsequent to the solidifying step, the substrate is populated by a plurality of physically separated imprinted layers corresponding to the plurality of flowable regions that were formed on the substrate.

For the above reasons, Examiner has failed to establish a case of *prima facie* obviousness.

V. Rejections Under 35 U.S.C. § 103(a) Over *Howell* in View of *Nemoto*

Claims 1-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 1,236,304 to Howell ("*Howell*") in view of U.S. Patent No. 3,781,214 to Nemoto *et al.* ("*Nemoto*"). Applicants respectfully traverse this rejection.

Examiner correctly describes the method used by Howell and Nemoto as "letter press printing." Final Office Action, at 6. Examiner then states: "[t]he Howell and Nemoto methods are interpreted to provide an imprint lithography process which reads on the claimed subject matter." Final Office Action, at 11.

It is well known that letterpress printing is a direct printing method, while lithography is an indirect printing method. Examiner admits the method of *Howell* and *Nemoto* is a letterpress method. It cannot be both. The letterpress method of *Howell* and *Nemoto* does not, therefore, include an imprint lithography mold, and the combination of the cited does not teach or suggest all the claim limitations of claims that refer to "imprint lithography" or "imprint lithography mold."

For example, Independent Claim 1 recites in part: "forming a plurality of flowable regions on said substrate" and "contacting said flowable regions with a plurality of imprint lithography molds disposed on a template." The combination of the cited art does not describe forming a flowable region on a substrate, or contacting said flowable regions with a plurality of imprint lithography molds. Further, the combination of the cited art does not describe features of Claim 3, which include: "spreading a material in said plurality of flowable regions over said

substrate while confining said material associated with each of said plurality of flowable regions to an area.”

Independent Claim 9 recites in part: “forming a plurality of flowable regions on a surface of said imprint lithography substrate” and “providing each of said plurality of flowable regions with a surface having a desired shape.” The combination of the cited art does not describe forming a plurality of flowable regions on a surface of said imprint lithography substrate and providing each of said plurality of flowable regions with a surface having a desired shape. Further, the combination of the cited art does not describe features of Claim 10, which include: “contacting said plurality of flowable regions with a plurality of imprint lithography molds disposed on a template.” Further, the combination of the cited art does not describe features of Claim 11, which include: “forming said plurality of flowable regions as an integer multiple of said plurality of imprint lithography molds.” Further, the combination of the cited art does not describe features of Claim 15, which include: “spreading a material in said plurality of flowable regions over said substrate while confining said material associated with each of said plurality of flowable regions to an area.”

Independent Claim 16 recites in part: “forming a plurality of flowable regions on said substrate; spreading a material in said plurality of flowable regions over said substrate while confining said material associated with each of said plurality of flowable regions to an area” and “contacting said flowable regions with a plurality of imprint lithography molds disposed on a template.” The combination of the cited art does not describe forming a plurality of flowable regions on said substrate, spreading a material in said plurality of flowable regions over said substrate while confining said material associated with each of said plurality of flowable regions to an area, and contacting said flowable regions with a plurality of imprint lithography molds disposed on a template. Further, the combination of the cited art does not describe features of Claim 17, which include: “forming said plurality of flowable regions as an integer multiple of said plurality of imprint lithography molds.”

Applicants respectfully request removal of the 35 U.S.C. § 103(a) rejections of Claims 1-20 over *Howell* in view of *Nemoto*.

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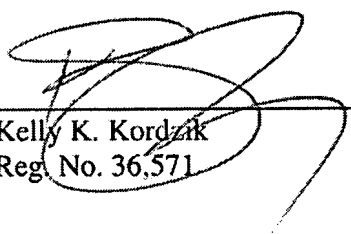
VI. Conclusion

As a result of the foregoing, it is asserted by Applicant that the Claims in the Application are now in condition for allowance, and allowance of such Claims is respectfully requested. Applicant believes that no further fees are due. However, should any fees be required, the Commissioner is authorized to charge such fees to Deposit Account No. 06-1050. Please reference Attorney Docket No. 21554-070001 (formerly P107-49-03).

If Examiner has any questions or comments concerning this paper or the present Application in general, the Examiner is invited to call the undersigned.

Respectfully submitted,

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